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Application Notes

External EQ Box for Allegro MX-1

About This Document

This document is intended for:

- Operators of TouchTunes Allegro MX-1 digital jukeboxes.
- TouchTunes Field Service, Customer Support, and Sales personnel.

It provides information concerning the setup and operation of the external EQ box provided with the current production models of the Allegro MX-1 jukebox.

Overview

Current production model Allegro MX-1 jukeboxes are equipped with an external EQ box (p/n 700212-001) for improved sound quality of the jukebox's audio zone 1.

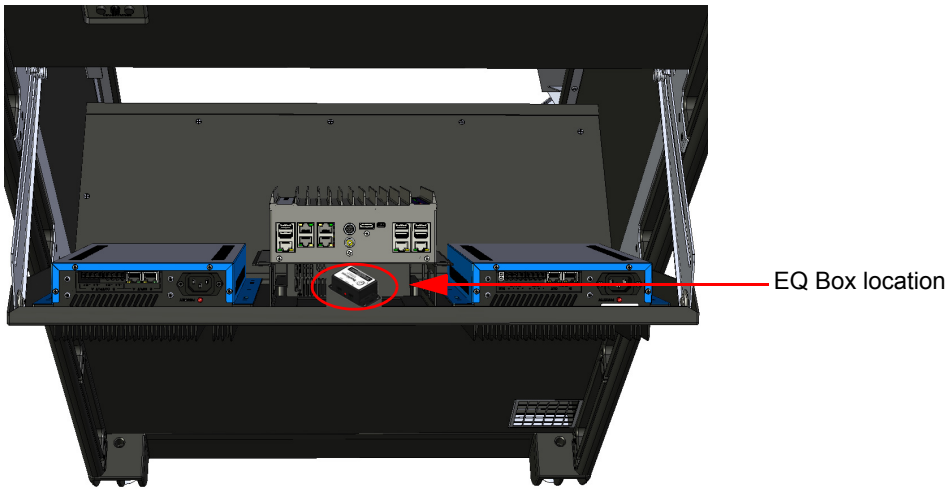
External EQ Box

The EQ curve of the EQ box (shown in "Frequency Response Curve" on page 4) has been optimized for the acoustic package of the Allegro MX-1, providing exceptional bass, treble and presence.

Note: Subsequent shipments of the Allegro MX-1, planned for 2009, will include a DSP microprocessor for active filtering, and a multi-band compressor (to replace the AVC), which will eliminate the need for the external EQ box, and will allow for better sound quality.

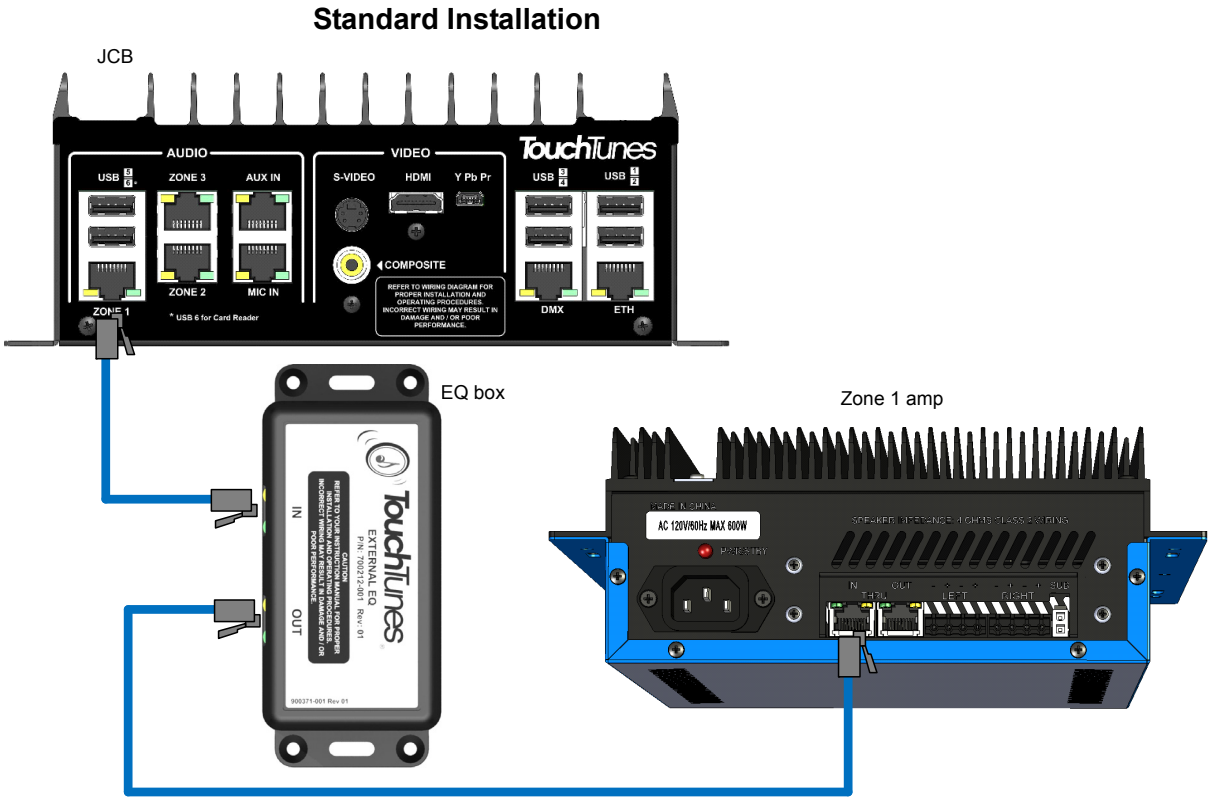
The External EQ Box applies **only to the Allegro MX-1 jukebox**. Do not attempt the installation of this equipment with other TouchTunes (MJS-based) jukeboxes, such as Allegro, Ovation, and Maestro^{II}, or with MJS-based conversion kits.

The EQ box is mounted on the Allegro MX-1's service tray, directly behind the JCB, and connects the audio zone 1 output of the JCB with the input of the 3-channel amplifier.



Locating the EQ Box

The following figure illustrates how the EQ box connects to other jukebox components in a standard installation



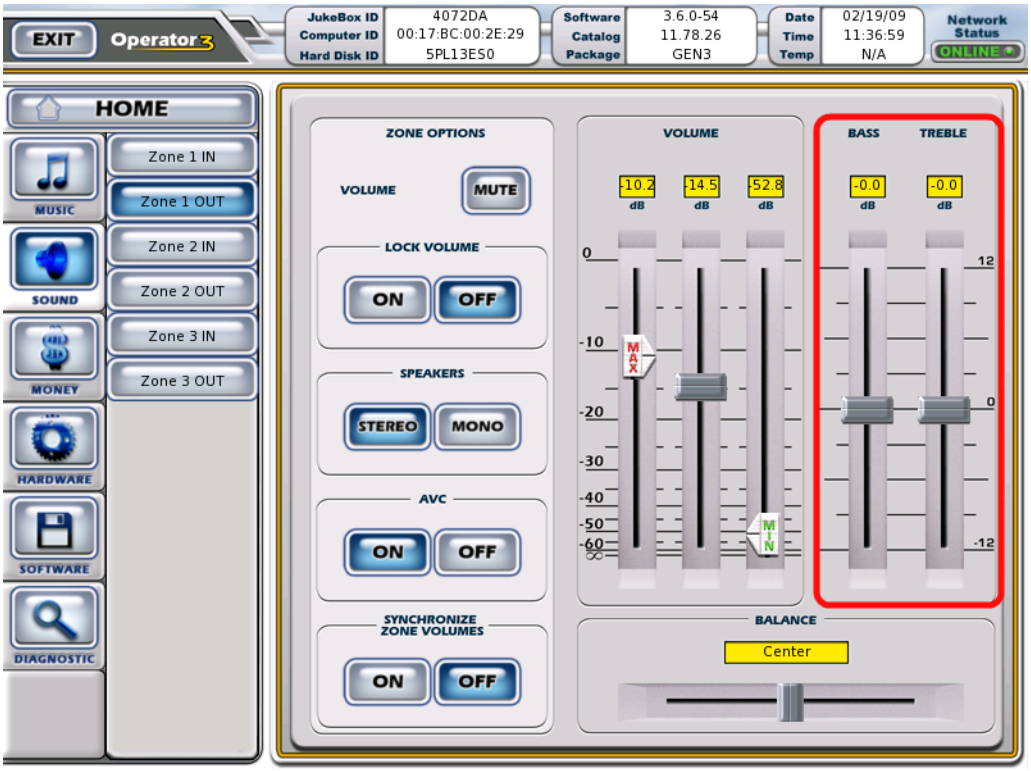
EQ Box Connections

Operating Guidelines

The following are some guidelines for the use and operation of the EQ box:

1. Keep the tone controls flat.

When the EQ box is installed, it is important to keep the jukebox's tone controls (bass and treble) flat. The EQ frequency curve has been optimized, and introducing frequency adjustments will alter the resulting sound quality. In addition, increasing the bass level may cause the system to saturate at a lower volume.



In some cases where the jukebox is located in the corner of a room, an adjustment on the bass below zero could be required. TouchTunes strongly recommends that you listen to a variety of different music selections and genres, at the lowest and highest volumes you intend to permit for use at your locations, before finalizing these settings.

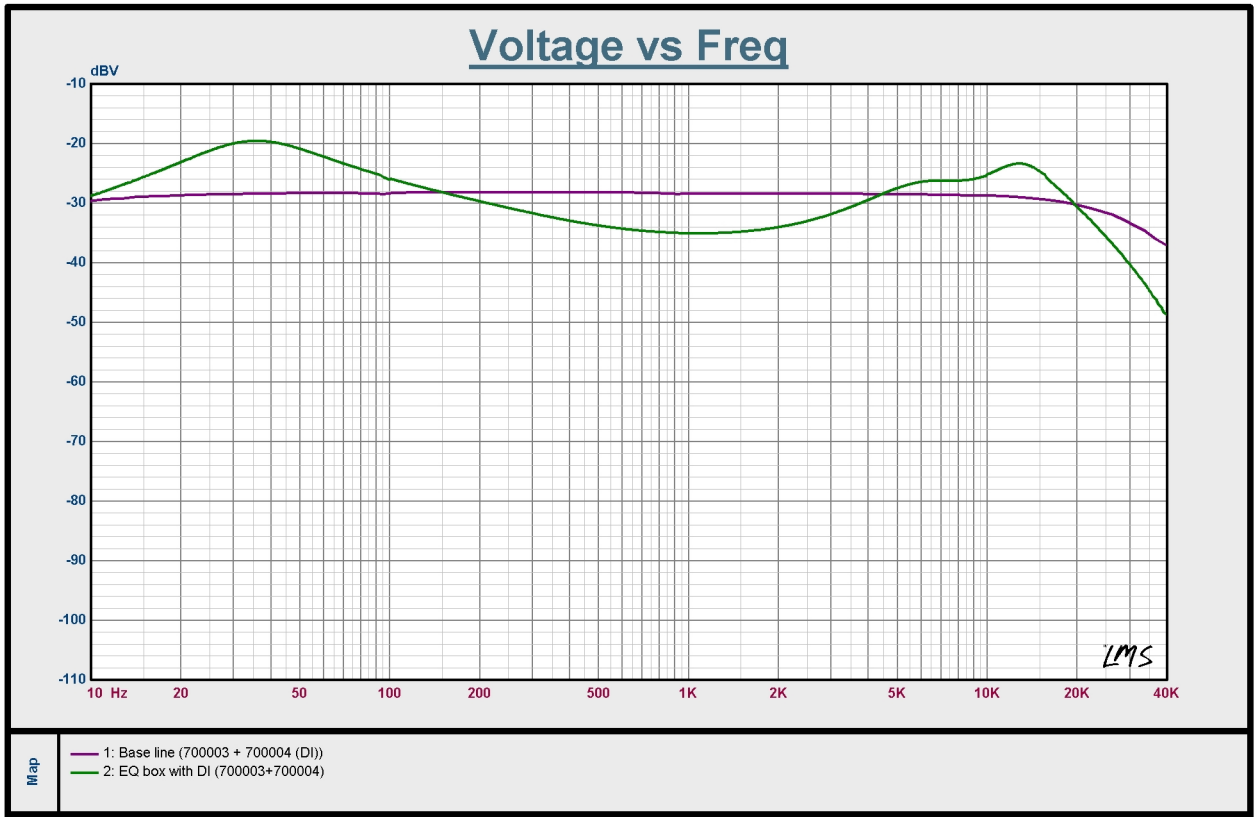
2. Use the external satellite speakers for improved sound quality.

The Allegro MX-1 is shipped with 4 external satellite speakers which may be connected to zone 1 audio output for improved sound coverage. TouchTunes recommends using the EQ box in conjunction with the external satellites to achieve the best audio quality.

IMPORTANT: When connecting the external satellite speakers, it is EXTREMELY IMPORTANT that you follow the instructions in *Allegro MX-1 Installation and Setup Guide* (p/n 900272-001). Improper installation can result in damage to your speakers and amplifier.

Frequency Response Curve

The frequency response for the external EQ box is shown in the following figure.



Frequency Response Curve

Contacting TouchTunes Support

If you need help with or have questions about this document, contact TouchTunes by:

- Using the email links on the Contacts page on the TouchTunes Dashboard at https://operator.touchtunes.com.
- Calling TouchTunes 24/7 Service Hotline at 847-353-1954.

To help us assist you more effectively with problem reports, the following information may be required when contacting TouchTunes Support:

- Jukebox ID or PlayPorTT ID.
- Jukebox model (i.e., Allegro MX-1).
- The serial number of any component you believe to be defective.
- The date/time of the problem.
- Actions performed immediately before the problem occurred.
- Any additional comments.

If you require assistance with this or any other TouchTunes product, please call or email technical support. We value your comments.

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